



DR. KHAIRUL NABILAH BINTI ZAINUL ARIFFIN

PENSYARAH UNIVERSITI DS13

CONTACT

Phone: 8783

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nabilahzainul@usim.edu.my

Faculty: Fakulti
Kejuruteraan Dan Alam
Bina

SUPERVISION

PhD - Completed: 0, Ongoing: 0

Master - Completed: 0,
Ongoing: 2

AREAS OF EXPERTISE

Other Electircal And Electronic Engineering

ACADEMIC QUALIFICATION

PhD in Kejuruteraan Elektrik Dan Elektronik (2019)

Master in Kejuruteraan Elektronik (sistem Telekomunikasi)
(2013)

Bachelor in Kejuruteraan Elektronik (kejuruteraan
Komputer) (2012)

Diploma in Kejuruteraan Elektronik (2009)

RESEARCH

1. INTELLIGENT RNN-PID CONTROL OF A SELF-BALANCING WHEELCHAIR FOR MOBILITY ASSISTANCE

2026 GERAN PENYELIDIKAN FUNDAMENTAL ON GOING CO-RESEARCHER

2. ANOMALY DETECTION IN WATER QUALITY PARAMETERS AND POLLUTION PREDICTION BASED ON REGRESSION AND RANDOM FOREST THEORY

2026 GERAN SEPADAN ANTARABANGSA ON GOING CO-RESEARCHER

3. SMART AQUAGUARD: IOT-POWERED WATER QUALITY MONITORING FOR SUSTAINABLE AQUATIC MANAGEMENT

2025 GERAN KPT ON GOING MAIN RESEARCHER

4. ARTIFICIAL INTELLIGENCE APPLICATIONS FOR INDUSTRIAL PIPELINE INTEGRITY MONITORING

2025 BIDUNI MIZANNIYAH ON GOING CO-RESEARCHER

5. SMART AQUAGUARD: IOT-POWERED WATER QUALITY MONITORING FOR SUSTAINABLE AQUATIC MANAGEMENT

2025 GERAN PENYELIDIKAN INDUSTRI ON GOING MAIN RESEARCHER

RESEARCH

6. AUTOMATED MACHINE LEARNING SYSTEM FOR INSTALLATION, OPERATION AND MAINTENANCE OF SOLAR PROJECTS USING SATELLITE AND DRONE IMAGERY

2025 GERAN PENYELIDIKAN INDUSTRI ON GOING CO-RESEARCHER

7. UAV-BASED AUTOMATED OIL PALM TREE DETECTION AND COUNTING

2025 GERAN PENYELIDIKAN INDUSTRI ON GOING CO-RESEARCHER

8. SURFACE PLASMON RESONANCE-BASED PHOTONIC CRYSTAL FIBER SENSOR FOR ACCURATE MICROPLASTIC DETECTION IN WATER USING ARTIFICIAL NEURAL NETWORKS

2025 GERAN KPT ON GOING CO-RESEARCHER

9. MODELLING OF SILICON CARBIDE (SiC) SCHOTTKY BARRIER DIODE FOR HIGH-TEMPERATURE TERAHERTZ APPLICATIONS

2024 GERAN KPT ON GOING MAIN RESEARCHER

10. SALAH CHAIR

2023 GERAN PENYELIDIKAN LAB2MARKET ON GOING CO-RESEARCHER

11. DEVELOPMENT OF UPPER LIMB EXOSKELETON SYSTEM

2023 GERAN PEMBANGUNAN INOVASI (GPI) ON GOING CO-RESEARCHER

12. DEVELOPMENT OF MOBILE APPLICATION FOR "EDUCATIONAL GAMES FOR KIDS WITH LEARNING DISABILITIES: KID WONDERS - KINDERS"

2022 GERAN PENYELIDIKAN AGENSI KERAJAAN COMPLETED MAIN RESEARCHER

13. RESOURCE MANAGEMENT OPTIMIZATION IN 6G NETWORK FOR SMART GRID COMMUNICATIONS USING DEEP LEARNING

2022 GERAN PENYELIDIKAN USIM ON GOING CO-RESEARCHER

14. DEVELOPMENT OF MOBILE APPLICATION FOR WOMEN'S "PRELOVED" BUSINESS PLATFORM: FASHION ARCADE (FACADE)

2022 GERAN PENYELIDIKAN AGENSI KERAJAAN COMPLETED CO-RESEARCHER

15. DEVELOPMENT OF LASER ILLUMINATION WARNING SYSTEM BASED ON LASER PHOTODIODE AND DETECTION TECHNOLOGY

2022 GERAN PENYELIDIKAN INDUSTRI COMPLETED CO-RESEARCHER

16. DEVELOPMENT OF INTELLIGENT WATER QUALITY MONITORING SYSTEM FOR AGRICULTURE SECTOR IN MALAYSIA

2022 GERAN SEPADAN AGENSI KERAJAAN ON GOING CO-RESEARCHER

17. FORMULATING A METHOD TO DETECT CONTAMINANT IN WATER BASED ON LIGHT PROPAGATION THEORY FOR CONSERVING NATURAL WATER RESOURCES

2021 GERAN KPT ON GOING CO-RESEARCHER

18. AUTOMATIC DISINFECTION CHAMBER

2020 GERAN PENYELIDIKAN COVID-19 COMPLETED CO-RESEARCHER

19. STUDY OF RAINFALL EFFECT TO OPTIMIZE POWER LINES PERFORMANCE

2020 GERAN PENYELIDIKAN USIM RACER COMPLETED CO-RESEARCHER

20. MODELLING AND CONTROL OF AN AERIAL TRANSPORTATION SYSTEM CARRYING SUSPENDED PAYLOAD

2020 GERAN PENYELIDIKAN USIM RACER COMPLETED CO-RESEARCHER

21. MODELLING OF QUANTUM BASED TUNNEL DIODE FOR THZ MEDICAL IMAGING

2019 GERAN PENYELIDIKAN USIM COMPLETED MAIN RESEARCHER

RESEARCH

22. SURVIVORS IDENTIFICATION AND LOCALIZATION FOR SAR ROBOTICS SYSTEM USING MACHINE LEARNING

2019

GERAN SEPADAN AGENSI KERAJAAN

COMPLETED

CO-RESEARCHER

PUBLICATION

1. ASSISTIVE PRAYER TECHNOLOGY: DEVELOPING A RAKAAT TRACKING SYSTEM FOR ELDERLY MUSLIMS WITH PHYSICAL LIMITATIONS

JOURNAL OF TOMOGRAPHY SYSTEM & SENSORS APPLICATION

2025 JOURNAL OTHER DATABASE CORRESPONDING AUTHOR

2. I-V CHARACTERISTICS OF GAAS/ALAS ASYMMETRIC SPACER LAYER TUNNEL DIODE (ASPAT) USING STATISTICAL VALIDATION

JOURNAL OF SCIENCE AND TECHNOLOGY

2025 JOURNAL MYCITE CO-AUTHOR

3. CAMERA-BASED REAL-TIME QURANIC SIGN LANGUAGE DETECTION SYSTEM USING LSTM DEEP LEARNING SEQUENCES

JOURNAL OF ENGINEERING AND TECHNOLOGY (JET)

2025 JOURNAL MYCITE CORRESPONDING AUTHOR

4. SIMULATION OF A DUAL-SIDE POLISHED PHOTONIC CRYSTAL FIBER FOR SURFACE PLASMON RESONANCE SENSING

JURNAL OPTOELEKTRONIK

2025 JOURNAL OTHER DATABASE CORRESPONDING AUTHOR

5. NUMERICAL OPTIMIZATION OF A SINGLE-MODE FIBER-BASED SPR SENSOR FOR AIR CONTAMINANT DETECTION APPLICATIONS

JURNAL OPTOELEKTRONIK

2025 JOURNAL OTHER DATABASE CORRESPONDING AUTHOR

6. POTENTIAL OF PORTABLE SOLAR POWERED ELECTROLYSIS SYSTEM FOR OFF-GRID HYDROGEN GENERATION

JOURNAL OF TOMOGRAPHY SYSTEM & SENSORS APPLICATION

2025 JOURNAL OTHER DATABASE CORRESPONDING AUTHOR

7. PERFORMANCE EVALUATION OF NATURAL ESTER OILS AS SUSTAINABLE DIELECTRIC FLUIDS FOR TRANSFORMERS: AI ENHANCED STATISTICAL ANALYSIS

IEEE TRANSACTIONS ON DIELECTRICS AND ELECTRICAL INSULATION

2024 JOURNAL ERA CO-AUTHOR

8. A COMSOL MULTIPHYSICS FOR POLY (VINYL-ALCOHOL) PVA HYDROGEL EFFECT ON PHOTOVOLTAIC SOLAR CELL BY USING HEAT TRANSFER MODULE

2024 IEEE INTERNATIONAL CONFERENCE ON APPLIED ELECTRONICS AND ENGINEERING (ICAEE)

2024 PROCEEDING SCOPUS MAIN AUTHOR

9. AUTONOMOUS MOBILE TROLLEY ROBOT (AMTRO): INT-CART

2024 POSTGRADUATE AND INDUSTRY RESEARCH COLLOQUIUM (PIRC)

2024 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

10. SURFACE PLASMON RESONANCE BASED PCF SENSOR FOR DOM DETECTION

2024 IEEE INTERNATIONAL CONFERENCE ON APPLIED ELECTRONICS AND ENGINEERING

2024 PROCEEDING NON-INDEX MAIN AUTHOR

11. PALM OIL AS A TRANSFORMER INSULATING FLUID: A REVIEW

2024 POSTGRADUATE AND INDUSTRY RESEARCH COLLOQUIUM (PIRC)

2024 PROCEEDING NON-INDEX CO-AUTHOR

12. TORQUE ASSESSMENT FOR LOW VOLTAGE AERIAL BUNDLE CABLE (ABC) INSULATED PIERCING CONNECTOR (IPC) USING AI ANALYSIS

2024 IEEE INTERNATIONAL CONFERENCE ON APPLIED ELECTRONICS AND ENGINEERING

2024 PROCEEDING SCOPUS CO-AUTHOR

13. SINGLE MODE FIBER BASED SPR SENSOR FOR THE DETECTION OF AIR CONTAMINANTS

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2024

2024 PROCEEDING OTHER DATABASE MAIN AUTHOR

PUBLICATION

14. TEMPERATURE DEPENDENT GAIN AND NOISE ANALYSIS OF AN ERBIUM DOPED FIBER AMPLIFIER WITH DIFFERENT PUMPING CONFIGURATIONS

ADVANCEMENT IN ENGINEERING AND TECHNOLOGY

2024 CHAPTER IN BOOK CO-AUTHOR

15. DETECTION OF CONTAMINATION IN WATER USING SPECTROSCOPY.

ADVANCEMENT IN ENGINEERING AND TECHNOLOGY

2024 CHAPTER IN BOOK CO-AUTHOR

16. REDESIGNING THE LASER WARNING SYSTEM FOR MILITARY APPLICATIONS

ADVANCEMENT IN ENGINEERING AND TECHNOLOGY

2024 CHAPTER IN BOOK CORRESPONDING AUTHOR

17. A5/1 STREAM CIPHER IN GLOBAL SYSTEM FOR MOBILE (GSM) (EMPIRICAL PERSPECTIVES)

ADVANCEMENT IN ENGINEERING AND TECHNOLOGY

2024 CHAPTER IN BOOK CO-AUTHOR

18. MODELLING BACKSCATTERED LIGHT IN FIBRE OPTIC BASED ON LIGHT PROPAGATION

ASM SCIENCE JOURNAL

2023 JOURNAL SCOPUS CO-AUTHOR

19. DEVELOPING A PORTABLE SPECTROMETER TO DETECT CHEMICAL CONTAMINANTS IN IRRIGATION WATER

AGRICULTURE

2023 JOURNAL OTHER DATABASE CORRESPONDING AUTHOR

20. IOT BASED INDOOR AIR AND WATER QUALITY MONITORING SYSTEM USING NODE-RED

9TH INTERNATIONAL CONFERENCE ON COMPUTER AND COMMUNICATION ENGINEERING (ICCC 2023)

2023 PROCEEDING SCOPUS MAIN AUTHOR

21. DESIGN OF SINGLE STAGE C BAND ERBIUM DOPED FIBER AMPLIFIER (EDFA) FOR OPTICAL COMMUNICATION

TECHNOLOGIES IN SCIENCE AND ENGINEERING : A MULTIDISCIPLINARY APPROACH

2023 CHAPTER IN BOOK CO-AUTHOR

22. CONTROL SYSTEM IN FLUID DIFFERENTIATION AND NATURAL GAS COMPRESSOR SECTORS

TECHNOLOGIES IN SCIENCE AND ENGINEERING

2023 CHAPTER IN BOOK CO-AUTHOR

23. ADVANCEMENTS IN MONITORING WATER QUALITY BASED ON VARIOUS SENSING METHODS: A SYSTEMATIC REVIEW

INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH

2022 JOURNAL ERA CO-AUTHOR

24. SMART AUTOMATIC COOLING SYSTEM WITH REDUCED HUMIDITY EFFECT FOR PET HOUSE DURING COVID-19 CRISIS

ASM SCIENCE JOURNAL

2022 JOURNAL SCOPUS CO-AUTHOR

25. A REVIEW ON WATER QUALITY MONITORING METHODS BASED ON ELECTRONICS AND OPTICAL SENSING

JOURNAL OF ADVANCED RESEARCH IN APPLIED SCIENCES AND ENGINEERING TECHNOLOGY

2022 JOURNAL OTHER DATABASE CORRESPONDING AUTHOR

26. AN ILLEGAL DUMPING DETECTION SYSTEM BASED ON IMAGE PROCESSING IN OPENALPR

ASM SCIENCE JOURNAL

2021 JOURNAL SCOPUS CO-AUTHOR

PUBLICATION

27. DELAY-AWARE 5G MILLIMETER-WAVE CELLULAR NETWORKS

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE (SAIS) 2021

2021 PROCEEDING NON-INDEX CO-AUTHOR

28. BLUEPRINT KELESTARIAN USIM: MENYEMARAKKAN KAMPUS BARAKAH

2021 BOOK CO-AUTHOR

29. ANALYSIS OF CURRENT-VOLTAGE CHARACTERISTICS ASSOCIATED TO THE QUANTUM STRUCTURE OF ASYMMETRIC SPACER LAYER TUNNEL DIODE (ASPAT): A PROMISING TERAHERTZ DEVICES

ADVANCE IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CORRESPONDING AUTHOR

30. ENERGY EFFICIENT DEVICE-TO-DEVICE COMMUNICATIONS UNDERLAYING CELLULAR NETWORKS FOR SMART GRID NEIGHBOURHOOD AREA NETWORKS

ADVANCE IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

31. IMPROVING ELECTRO-THERMAL CALCULATION OF OVERHEAD LINES CONDUCTORS FOR MORE ON-GRID RENEWABLE ENERGY RESOURCES

ADVANCE IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

32. EFFECT OF THE DOPING CONCENTRATION AND JUNCTION DEPTH ON THE PERFORMANCE OF SOLAR CELLS

ADVANCE IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

33. EMOTION DETECTION BASED ON AUDIO/VOICE SIGNAL FOR AUTISM SPECTRUM DISORDER (ASD) USING CORRELATION METHOD

ADVANCE IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

34. RADIO OVER FIBRE FREE SPACE OPTICS (ROFSO) SYSTEM

ADVANCE IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

35. EFFECT OF THE SLOT SHAPE AND GROUND PLANE ON THE MICROSTRIP PATCH ANTENNA PERFORMANCE

ADVANCE IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

36. DESIGN OF A LOW-COST AUTOMATIC DISINFECTION CHAMBER

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE (SAIS) 2020

2020 PROCEEDING NON-INDEX CO-AUTHOR

37. IMPACT OF IDEALITY FACTOR AND SEMICONDUCTING MATERIAL ON PV MODULE PERFORMANCES

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE (SAIS) 2020

2020 PROCEEDING NON-INDEX CO-AUTHOR

38. PERFORMANCE OF ROFSO OFDM SYSTEM UNDER MALAYSIA CLIMATIC CONDITION FOR WIRELESS COMMUNICATION

KOLOKIUW SISWAZAH FAKULTI SAINS DAN TEKNOLOGI 2020 (KOSIST 2020)

2020 PROCEEDING NON-INDEX CO-AUTHOR

39. DC ANALYSIS OF GAAS/ALAS SINGLE BARRIER ASYMMETRIC SPACER TUNNEL DIODE

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE (SAIS) 2020

2020 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

PUBLICATION

40. DRIVER BEHAVIOUR MONITORING AND ALERT SYSTEM BY USING MACHINE LEARNING

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE (SAIS) 2020

2020

PROCEEDING

NON-INDEX

CORRESPONDING AUTHOR

41. NON-EQUILIBRIUM GREENS FUNCTION ON GAAS/ALAS DOUBLE BARRIER QUANTUM WELLS RESONANT TUNNELLING DIODE (RTD)

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE (SAIS) 2019

2019

PROCEEDING

NON-INDEX

MAIN AUTHOR

42. FINITE ELEMENT MODELING OF OVERHEAD LINE THERMAL RATING METHOD

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE (SAIS) 2019

2019

PROCEEDING

NON-INDEX

CO-AUTHOR

43. PERFORMANCE ANALYSIS OF SISO AND MIMO FSO COMMUNICATION UNDER MALAYSIA WEATHER CONDITION BY EMPLOYING OPTISYTEM

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE (SAIS) 2019

2019

PROCEEDING

NON-INDEX

CO-AUTHOR

CONSULTATION

1. Penggubal Soalan Basic Engineering 2

Kementerian Pendidikan Malaysia



2. Pentaksir Soalan Basic Engineering 1

Kementerian Pendidikan Malaysia



3. Pentaksir Soalan Electrical and Electronic Engineering 2

Kementerian Pendidikan Malaysia



4. Panel Penasihat Industri (Universiti Awam)

Universiti Teknikal Malaysia Melaka (UTeM)



AWARDS/RECOGNITION

1. EMPLOYEE OF THE MONTH (JUN 2025)

2025 UNIVERSITY

2. TRAINER / FACILITATOR

KEMENTERIAN PENDIDIKAN MALAYSIA (KPM)

2025 NATIONAL

3. ADVISORY / EDITOR / EDITORIAL

NAICO MALAYSIA & MINISTRY OF INVESTMENT, TRADE AND INDUSTRY (MITI)

2025 NATIONAL

4. ACADEMIC ADVISOR

KEMENTERIAN PENDIDIKAN TINGGI (KPT)

2025 NATIONAL

5. ARTIFICIAL INTELLIGENCE APPLICATIONS FOR CCS PIPELINE INTEGRITY MONITORING

INNOVATION BANK CHALLENGE 2025

2025 ANTARABANGSA SILVER

6. ANUGERAH E-PEMBELAJARAN SESI AKADEMIK 2023/2024

2024 UNIVERSITY

7. MUSOLLI COMPANION

4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITI BRONZE

8. CONCEPTUAL MODEL FOR A PORTABLE WRIST AND HAND REHABILITATION SYSTEM FOR STROKE PATIENTS

4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITI SILVER

9. INT-CART: INTELLIGENT SHOPPING CART ROBOT

4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITI GOLD

10. EMPLOYEE OF THE MONTH (JUN 2023)

2023 UNIVERSITY

11. ACADEMIC ADVISOR

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2023 NATIONAL

12. ACADEMIC ADVISOR

KEMENTERIAN PENDIDIKAN MALAYSIA (KPM)

2023 NATIONAL

13. ACADEMIC ADVISOR

KEMENTERIAN PENDIDIKAN MALAYSIA (KPM)

2023 NATIONAL

14. ACADEMIC ADVISOR

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2023 NATIONAL

AWARDS/RECOGNITION

15. CONCEPTUAL MODELLING FOR RECYCLING CO2 EMISSION WITH FLEXIBLE THIN FILM SOLAR

SCIENCE AND TECHNOLOGY RESERACH EXPO (SCITEX@20TH FST)

2023 UNIVERSITI BRONZE

16. ULTRASONIC TOMOGRAPHY TECHNIQUE FOR DETECTING FOREIGN OBJECTS BELOW 1 MILIMETRE IN MILK PACKAGING

Pertandingan Inovasi Halal Nasional 2023 (PIHAN'23)

2023 KEBANGSAAN GOLD

17. ACADEMIC ADVISOR

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2022 NATIONAL

18. ACADEMIC ADVISOR

PIALA INOVASI, PIALA MENTERI PENGAJIAN TINGGI 2022

2022 NATIONAL

19. SMART PARCEL DROP BOX

PERTANDINGAN REKACIPTA INOVASI INTERNASIONAL & NASIONAL 2022 (PRIIN 2022)

2022 ANTARABANGSA SILVER

20. IOT- BASED BATTERY MONITORING SYSTEM

PERTANDINGAN REKACIPTA INOVASI INTERNASIONAL & NASIONAL 2022 (PRIIN 2022)

2022 ANTARABANGSA SILVER

21. E-PROSUMER: SMART PRECISION FERTIGATION SYSTEM

Persidangan dan Ekspo Ciptaan Institusi Pengajian Tinggi Antarabangsa (PECIPTA22)

2022 ANTARABANGSA SILVER

22. RUBBER TREE TRUNK HUMIDITY INSPECTOR

PERTANDINGAN REKACIPTA INOVASI INTERNASIONAL & NASIONAL 2022 (PRIIN 2022)

2022 ANTARABANGSA SILVER

23. IOT-BASED BATTERY MONITORING SYSTEM

PERTANDINGAN HASIL PERTANIAN INDUSTRI ASAS TANI DAN INOVASI

2022 UNIVERSITI CERTIFICATE OF APPRECIATION

24. ANUGERAH E-PEMBELAJARAN USIM (PENSYARAH AKTIF)

2021 UNIVERSITY

25. EMPLOYEE OF THE MONTH (JANUARY 2021)

2021 UNIVERSITY

26. ANUGERAH PERKHIDMATAN CEMERLANG (APC)

2021 UNIVERSITY

27. WATER QUALITY DETECTION USING SMART DECISION

PERTANDINGAN REKACIPTA INOVASI NASIONAL (PRIN) 2021

2021 ANTARABANGSA SILVER

28. SMART WATER TURBIDITY SYSTEM

PERTANDINGAN REKACIPTA INOVASI NASIONAL (PRIN) 2021

2021 ANTARABANGSA GOLD

AWARDS/RECOGNITION

29. PICK SEPARATE THROW (PST)

GREEN SULAM COMPETITION 2021

2021 KEBANGSAAN GOLD

30. CAP6-ARSIS (AGROBOT)

GREEN SULAM COMPETITION 2021

2021 KEBANGSAAN BRONZE

31. CAP5-AQUA HYGIENE ROBOTICS

GREEN SULAM COMPETITION 2021

2021 KEBANGSAAN SILVER

32. SMART VILLAGE

GREEN SULAM COMPETITION 2021

2021 KEBANGSAAN CERTIFICATE OF APPRECIATION

33. E-PROSUMER: SMART PRECISION FERTIGATION SYSTEM

KARNIVAL INOVASI UTEmEX 2021 VIRTUAL

2021 KEBANGSAAN SILVER

34. SMART VILLAGE A CONCEPT

KARNIVAL INOVASI UTEmEX 2021 VIRTUAL

2021 KEBANGSAAN PLATINUM

35. GREEN GIVER FOR CLEAN ENVIRONMENT (GG FORCE): A CONCEPT

KARNIVAL INOVASI UTEmEX 2021 VIRTUAL

2021 KEBANGSAAN BRONZE

36. SMART PRECISION FERTIGATION SYSTEM

PERTANDINGAN REKACIPTA INOVASI NASIONAL (PRIN) 2021

2021 ANTARABANGSA GOLD

37. SMART VILLAGE

PERTANDINGAN REKACIPTA INOVASI NASIONAL (PRIN) 2021

2021 ANTARABANGSA GOLD

38. E-PROSUMER: SMART PRECISION FERTIGATION SYSTEM

INTERNATIONAL VIRTUAL EXPO OF INNOVATION PRODUCT AND SYSTEM DESIGN (In-VIDE) 2021

2021 ANTARABANGSA SILVER

39. LAMAN PROSUMER CONTROL SYSTEM

GREEN SULAM COMPETITION 2021

2021 KEBANGSAAN SILVER

40. SMART VILLAGE; A CONCEPT

KARNIVAL INOVASI UTEmEX 2021 VIRTUAL

2021 KEBANGSAAN GOLD

41. ACADEMIC ADVISOR

KEMENTERIAN PENDIDIKAN MALAYSIA (KPM)

2020 NATIONAL

42. ACADEMIC ADVISOR

KEMENTERIAN PENDIDIKAN MALAYSIA (KPM)

2020

NATIONAL

AWARDS/RECOGNITION

43. ACADEMIC ADVISOR

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2020

NATIONAL

44. EMPLOYEE OF THE MONTH (OCTOBER 2019)

2019

OTHERS